The Macdonald FARM Journal

Vol. 22, No. 9

September, 1961

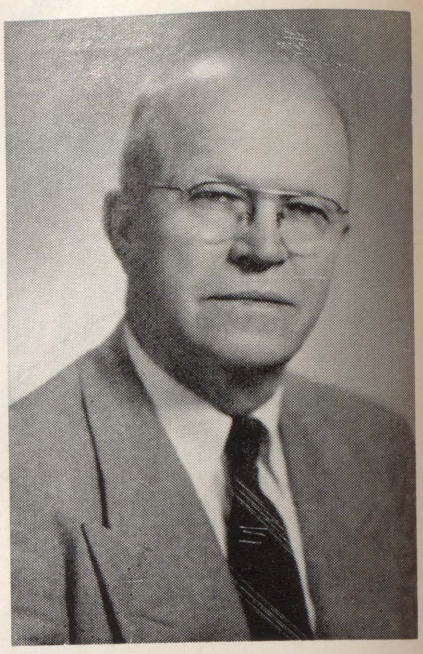
The Good Shepherd

uebec Poultry Industry Survey

Story of a M-M-Morgue

Search For A Canadian Broiler Chick

The Future For LIVESTOCK PRODUCERS



Prof. L. H. HAMILTON, who retired last year as chairman of the Department of Animal Husbandry, brings this message to livestockmen. Prof Hamilton continued on the College staff this past year on a post-retirement basis. He is now secretary for the Aberdeen Angus Breed Association for Quebec.

I spent a large part of one day recently, discussing the details of a plan for producing twelve to fifteen thousand pigs on a small area of land. This is a very involved problem when one considers housing, and equipment, the feed and labor requirements and the money involved in such a project.

Many questions come to mind but perhaps the first of these is "Will it pay?" The answer to this can be affected by many factors but I believe there is a very good chance for profit. In fact there are units of this size already established which are not unprofitable. A few dollars net profit per pig on an enterprise of this size represents a considerable amount of money. The same profit for the farmer who produces 100 market hogs is not very significant.

In beef cattle the trend is toward larger units developed along specialized lines. Most people have some awareness of the feeding enterprises which have been started in parts of Eastern Canada. This, it would appear, is just the beginning. The establishment of more and even larger units is being discussed. The people who put their faith and money in undertakings of this kind are showing great confidence in the future of the livestock business and the livestock farmer. They believe the livestock breeders will continue to improve and to produce the quality and the kind of animals they want. This means, in beef cattle, those types which grow fast, mature early, put on flesh rapidly and meet the requirements of the retailer and consumer.

In pig production it means even stronger competition in an already competitive market. It means fast growing pigs that will grade a high percentage of "Grade A" on the smallest quantity of feed possible.

Similar examples are not uncommon in dairy cattle production. The average farmer keeps more cows than he did some few years ago but larger units are being established. In the future dairymen will be keeping even larger units, and through labor-saving equipment and more economical housing, will produce more efficiently.

To the consumer this means cheaper meat, milk and by-products. It means a higher quality product. It is not too many years ago that questions were raised about the quality of many farm products including meat, milk, eggs and butter. This is not so today as the quality of farm products available to the consumer is very good.

To the farmer it requires a new look at farming. The capital overhead, the necessary efficiency and the high standard of quality all require careful attention. It would appear that those who are to become successful must be better than the average. They must be specialists not only in producing high quality livestock but in the whole operation of production and marketing. The dairy farmer who can properly assess a breeding programme or who can put together two lines of breeding which will demonstrate production and type will still be in the forefront. Also, if he wishes to work for someone else a job will be waiting for him.

The beef farmer who can consistently produce foundation animals of the correct type and animals which gain efficiently at a fast rate will always find a satisfactory market. The same is true of the hog producer. We have quite accurate means of measuring efficiency in all types of livestock production and there are opportunities for those who can demonstrate this efficiency.

Farming patterns have changed and will continue to change. Every farmer must watch for the effects these changes will have on his own farm operation for he must be able to compete successfully. However, his responsibilities do not end here for he must also, with the co-operation of the research specialist, feed a hungry world.

FALLOUT ON THE FARM

"Fallout on the Farm" is a publication of the Canada Department of Agriculture which describes preparations farmers should make in case fallout occurs and gives details on how to prevent contamination of farm livestock and food supplies. Available on request from the Information Division, Canada Department of Agriculture.

COVER PICTURE

A fine flock of Suffolks on the farm of Alfred Jay and Son, at Litchfield in Pontiac County.

Photo by Ciné-photo.

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Swimming in the U.S.A.

Not long ago we went to the beach —in New York State. We weren't the only Quebecers there. In this particular park and beach 2 of every 3 cars had Quebec licence plates! These people had driven about 100 miles from Montreal to a public beach no more than 6 rods long. Any one of our lakes would have served as well had our authorities but reserved a few rods of lakeshore for the public, and supplied it with a few acres of park equipped with picnic tables. Until this is done Quebec will continue to lag behind other states and provinces in tourism.

The message ought to be clear enough. Let's have some public recreation areas near our cities. We certainly have enough submarginal land. Every citizen, especially farmers, should be concerned enough to put the bee on provincial and municipal authorities.

Picturesque But . . .

The "Resources for Tomorrow" Conference which will be held next month in Montreal deserves the attention of all citizens and especially of farmers. This is not to imply that farmers are poor conservationists although there is definitely room for improvement in some cases. What we do mean is that some of the land cleared by our forefathers to be tilled with horses should have another look now that we have mechanized agriculture. Look around you or drive from Shawville to Otter Lake; Highwater to South Stukely or take any of the roads which wind through our picturesque hills and dales. A program which would plant trees on some of these toboggan slopes and free the kindred who have been consigned by ill-luck and history to a bare existence would surely be beneficial to future generations and to the present one. The Conference cannot be expected to do this, but it could arouse public opinion and draw up a blueprint.

You'rx a kxy pxrson

Xvxn though my typxwritxr is an old modxl, it works quitx wxll xxcxpt for onx of thx kxys. I havx wishxd many timxs that it workxd pxrfxctly. It is trux thxrx arx forty-six kxys that function wxll xnough, but just onx kxy not working makxs thx diffxrxncx.

Somxtimàs it sxxms to mx our Co-op is likx my typxwritxr — not all thx kxy pxoplx arx working propxrly.

You may say to yoursxlf, wxll, I am only onx pxrson. It won't makx much diffxrxncx. But, you sxx, thx Co-op to bx xffxctivx nxxds thx activx participation of xvxry pxrson.

So thx nxxt timx you think you arx only onx pxrson and that your xffort is not nxxdxd, rxmxmbxr my typxwritxr and say to yoursxlf, I am a kxy pxrson and nxxdxd vxry much!

QUEBEC POULTRYMEN SURVEY INDUSTRY

There's still room for the mixed farm egg flock.

by L. G. YOUNG

Quebec poultrymen made a searching survey of their industry at the recent Provincial Poultry Congress at Macdonald College, sponsored by the Provincial Poultry Council of which Dr. Rolland Poirier is President. What the specialists pieced together was a fairly healthy industry with lots of growing pains and a few underdeveloped parts as the above summary shows. The following report will deal first with the egg industry since this is the segment of interest to the greatest number of farmers, and follow it with brief glances at the turkey and broiler industries.

Quebec Egg Production Inadequate for Needs

Of the 120 million dozen eggs which Quebecers consume each year only 48-54% are produced in this Province. The balance are imported, mostly across the western provincial boundary, 70% from Ontario and 30% from the West and Maritimes. Provincial production is also spotty with the experts calling for sharply increased production in the Eastern Townships, Hull, Abitibi and Lake St. Jean regions. There is room for a general increase in production, but these districts are especially deficient. Besides short production, egg production tends to be cyclical with a fluctuation of 5-29¢ per dozen, as the price chart shows. Experts urge producers to try to maintain an even annual production.

Quebec producers can compete, say the experts. They point out that Western and Ontario producers have to pay at least as much for buildings, labour and chicks as do Quebec poultrymen. Manitoba and Saskatchewan producers may buy their feed for about 1½¢ per pound less than Quebec farmers, but at 5 pounds of feed to 1 dozen eggs this difference will amount only to 7½¢ per dozen eggs. However, this price advantage is wiped out by other costs.

Last May Grade A-Large eggs at Regina, Saskatoon and Winnipeg were bringing producers 21 to 23¢ per dozen while in Montreal, Quebec and Three Rivers producer prices were 34¢, about 12¢ per dozen more. At the same time Ontario producers receive about 3¢ per dozen less than Quebec farmers. These prices are based on a comparison between transportation

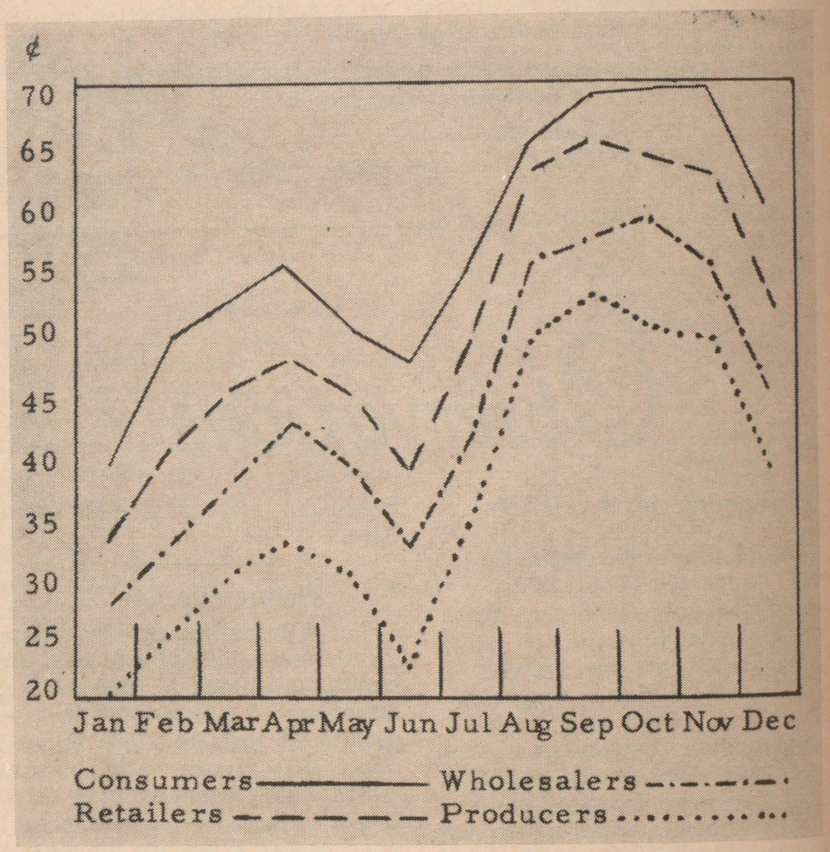
SITUATION NOW —

— Quebec egg production only 48-54% of Quebec consumption
— rusty egg marketing system
— some Quebec produced eggs under par in quality
— price advantage for Quebec egg producers
— Quebec production of heavy turkeys only 40% of consumption
— production of broilers and turkey broilers = consumption
— high percentage of broiler hatching eggs imported
— more than 90% of Quebec broiler chicks of American breeding
— specialization and integration

CRYSTAL BALL GAZERS SEE —

— room for 90% increase in Quebec egg production
— improvement in egg quality in face of competition
— fewer grading stations handling more eggs
— better organized marketing of eggs and broilers
— room for mixed farm and specialized egg flocks
— improved management
— development of Canadian poultry strains and crosses
— fewer hatcheries producing more chicks
— narrowing margin of profit

Average prices per dozen eggs, Grade A Large, Montreal Market, 15th of each month in 1960



terminals. The advantage enjoyed by producers supplying districts outside of terminal points is even greater and producers in, for instance, the Eastern Townships, which is short 3,111,000 dozen eggs per year, would enjoy a commanding advantage because of transport charges from Montreal out. Besides this, local producers should obtain a premium for *fresh* eggs if they produce good quality and market promptly.

Flock Size

Two sizes of flock should pay well. The first is the mixed farm flock of 500 to 1000 hens — enough to pay the farmer to look after properly. This size flock would pay for the trouble of good management and would produce sufficient eggs to interest the owner in proper care of eggs. Owners of this size flock, in many cases, should retail their eggs, thus keeping part of the 19¢ markup which accrues on eggs going through wholesale channels (see chart).

The second size flock would be that of the specialist. This flock should be increased to a minimum of 12,000 hens which would require a modern mechanized laying house with work for two people. Such an operation would permit an exchange of work for the operators and some free week-ends, an important factor when hiring help.

As to the best type of laying bird, the farmer can choose between the light and heavy hen. More and more are accepting the Leghorn type which lays more eggs and with less feed per dozen. However, Montreal's Kosher market offers a ready demand for meat-type hens so there is still room for this kind of hen, when the farmer has a special market at a premium price for the meat.

Sales Channels, Quality Still Weak

For the convenience of farmers there are about 210 grading stations for eggs. Of these 153 are privately operated and 57 are operated by co-operatives. Experts suggests that this number should be, and will be, sharply reduced in the near future as improved transportation makes fewer stations necessary.

Quality of eggs needs improving. While more and more producers are handling and storing eggs properly, a few are not cooling them fast enough, are not keeping them at the right temperature, and

(*Continued on page* 15)

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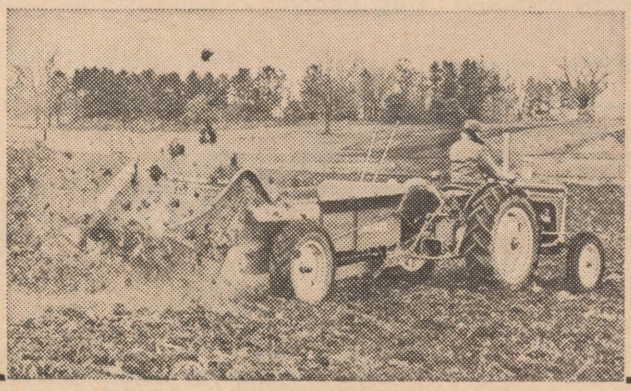

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SEARCH for a CANADIAN BROILER CHICK

More than 90% of broiler chicks now produced in Canada are of American breeding. Can Canada develop her own strains?

Prof. Rolland POIRIER

Department of Animal Science

This article is a report of a breeding project to produce broiler chicks equal to or better than the imported American strains now being used. At the present time most of the broiler chicks being used are of American breeding. This a factual report, easy to read and is an excellent illustration of the method animal researchers use to produce products suited to the demands of the consumer and the efficiency conscious producer. The shorter life span of poultry enables researchers to achieve results far more quickly than is possible with large animals.

The four "locations" mentioned where this project was carried out were four broiler farms. "Mean" used in these tables refers to "average".

Purpose of the Project

The purpose of this project, at least in its initial phase, is to supply our hatcheries with breeding birds that can produce a broiler chick of equal or better quality than the chicks they are now producing from American stock. Afterwards we will try to maintain or even improve the quality of our initial birds.

Outline of the First Cycle of Crosses

From the beginning it was decided that the method of three-way crosses was better adapted to broiler production than any other breeding method and therefore it was accepted as the basis of our work.

Five strains, to be used on the female side, were identified by the following letters: A, B, C, D and E, and they produced the following six single crosses: AC — BA — EA — AD — CA — AB. The following records were kept on these six crosses: mortality, weight, color and conformation at 9 weeks, weight at laying time. A selection was done between these crosses based on these characteristics and four of the crosses were kept to supply females for our final matings. The four crosses selected were the following:

AC BA EA AD

Three different strains were used to supply the males for our final matings and they were identified by the following letters:

O—M—N

Eight three-way crosses were made up in the following way:

O x AC	M x AC	N x BA
O x AD	M x BA	N x EA
	M x EA	
	M x AD	

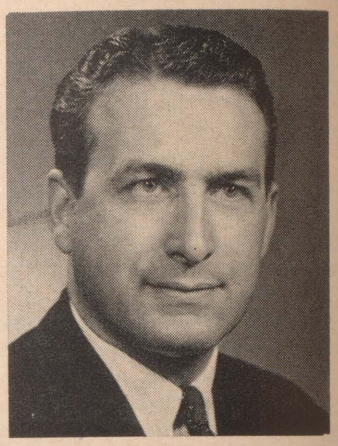
The chicks supplied by these eight three-way crosses were raised and tested in competition with one control group made up of well-known commercial chicks of American origin and the data taken on these birds are covered in this first report.

These eight three-way crosses, the control group and another experimental group were tested simultaneously at four locations. In order to simplify the description of the results we have adopted the following symbols for these ten different groups of birds:

Control Group	C
Experimental Group	D
O x AC	X
O x AD	R
M x AC	M
M x BA	V
M x EA	O
M x AD	L
N x BA	S
N x EA	T

EXPERIMENTAL RESULTS

We wish to appraise the reaction of each of the different genetic groups to four different environments. The four locations were different in types of buildings, in efficiency of insulation, in flock management, in date of hatch, in method of feeding, in brand of feeds and also in incidence of CRD.



Liveweight

In Table 1 we have combined together the experimental results obtained at four locations for the above mentioned characteristics and we have calculated mean values for each of the groups of birds.

The mean weight of a broiler at a fixed age is probably the best single measure that we have to appraise its economical value. In Table 1 we find in the column of Mean Weights that the control group has a mean liveweight of 3.34 lbs. One of the crosses, X, has exactly the same mean liveweight. Four other crosses have better mean liveweight than the control:

Cross V — has a mean liveweight of 3.49 lbs.

Cross S — has a mean liveweight of 3.40 lbs.

Cross L — has a mean liveweight of 3.38 lbs.

Cross T — has a mean liveweight of 3.35 lbs.

All the other crosses, R, O, D and M, give figures inferior to that of the control.

Feed Conversion

The second most important economical characteristic is probably feed conversion. The control group is first with 2.50. Three crosses, X, V and R, are very near to the control with 2.52. Four other crosses are within one tenth of the control and they are M, S, T, L. The other two crosses seem to be definitely inferior for this characteristic.

Difference of weight between sexes

In Table 1, we can see figures for the differences between sexes in liveweight. This characteristic is also important because a low difference enables the producer to send all of his birds at the same time to market thus reducing the expenses for the manipulation of the birds. Furthermore, the processing plants always prefer to keep to a minimum the variation in weight in order to sell a more uniform product.

The crosses X and S have shown an excellent performance in that respect with differences of .67 and .70. Crosses V, O, M and D have shown lower differences than the control.

Feed efficiency

We have just seen three char-

(*Continued on page 8*)

TABLE NO. I

BROILER TEST — LIVEWEIGHT + FEED CONVERSION ALL LOCATIONS

	LOCATION "A"			LOCATION "B"			LOCATION "C"			LOCATION "D"			MEAN VALUES		
Cross	Mean Wt.	Dif. in weight between sexes	Feed conversion	Mean Wt.	Dif. in weight between sexes	Feed conversion	Mean Wt.	Dif. in weight between sexes	Feed conversion	Mean Wt.	Dif. in weight between sexes	Feed conversion	Dif. in weight between sexes	Mean wt.	Feed conversion
C	3.18	.70	2.58	3.50	.85	2.55	3.23	.79		3.96	1.12	2.38	.86	3.34	2.50
D	2.77	.75	2.87	2.94	.59	2.72	3.38	.74		3.53	.94	2.56	.75	3.16	2.72
L	3.16	.83	2.66	3.19	.78	2.77	3.59	.66		3.83	1.02	2.32	.82	3.38	2.58
M	3.07	.79	2.54	3.20	.74	2.61	2.78	.63		3.60	.83	2.48	.75	3.13	2.54
O	2.74	.61	2.87	3.22	.75	2.56	3.31	.53		3.76	1.02	2.46	.73	3.17	2.63
R	3.23	.91	2.57	3.29	.78	2.63	3.31	.68		3.62	.86	2.35	.81	3.31	2.52
S	3.30	.57	2.59	3.23	.71	2.61	3.50	.60		3.64	.80	2.46	.67	3.40	2.55
T	3.44	.84	2.57	3.07	.84	2.73	3.40	.62		3.53	1.06	2.40	.84	3.35	2.57
V	3.36	.67	2.52	3.25	.71	2.64	3.59	.66		3.73	1.04	2.40	.77	3.49	2.52
X	3.13	.64	2.51	3.27	.78	2.61	3.37	.66		3.61	.73	2.43	.70	3.34	2.52
MEAN VALUES	3.14	.73	2.62	3.25	.75	2.64	3.35	.66	2.36	3.73	.94	2.42			

TABLE NO. 2

BROILER TEST — EVISCERATED WEIGHT — MORTALITY — ALL LOCATIONS

	LOCATION "A"			LOCATION "B"			LOCATION "C"			LOCATION "D"			MEAN VALUES		
Cross	Mean Wt.	% Evis-cera-tion	Mor-tality	Mean wt.	% Evis-cera-tion	Mort-ality	Mean wt.	% Evis-cera-tion	Mor-tality	Mean wt.	% Evis-cera-tion	Mor-tality	Mean wt.	% Evis-cera-tion	Mor-tality
C	2.27	71.4	2.6	2.45	70.2	2.3	2.38	73.7	3.3	2.79	70.5	2.5	2.40	71.5	2.67
D	1.97	70.3	5.6	2.10	71.5	4.7	2.47	73.2	3.0	2.39	67.9	3.1	2.24	70.7	4.10
L	2.32	69.4	4.8	2.25	71.7	3.8	2.61	72.5	5.0	2.69	70.3	2.2	2.43	71.0	3.95
M	2.20	71.2	3.5	2.27	71.2	4.3	2.10	77.0	4.4	2.60	66.3	1.2	2.26	71.4	3.35
O	1.92	68.4	6.3	2.25	69.8	5.5	2.42	72.9	4.7	2.58	68.7	3.0	2.23	70.0	4.87
R	2.33	70.9	3.7	2.33	70.6	4.2	2.48	75.0	6.7	2.45	65.6	1.2	2.37	70.5	3.95
S	2.40	72.3	3.0	2.26	70.1	2.7	2.52	71.9	3.3	2.53	69.7	2.8	2.43	71.0	2.95
T	2.47	70.7	2.4	2.15	70.1	4.6	2.49	73.2	4.4	2.53	71.6	2.6	2.40	71.4	3.50
V	2.43	72.4	1.1	2.31	70.9	4.1	2.39	70.9	3.6	2.64	71.1	1.8	2.46	71.3	2.65
X	2.21	69.0	1.7	2.29	69.9	3.0	2.66	74.2	3.7	2.51	69.5	.3	2.39	70.7	2.17
MEAN VALUES	2.25	71.7	3.4%	2.29	70.5	3.7%	2.49	72.6	4.1%	2.56	69.1	2.1%			

SEARCH FOR . . . *(from page 7)*

acteristics having a definite influence on the profits of the grower. The two first ones can be combined together to give a figure which we call feed efficiency. We wish to give now mean feed efficiencies for the best crosses in comparison with the control.

Feed Efficiency

Control group	133.6
Cross V	138.5
Cross S	133.3
Cross X	132.5
Cross T	131.4
Cross R	131.3
Cross L	131.0

The cross V seemed to be superior to the control and the five other crosses are either equal or slightly lower than the control.

Mortality-Eviscerated weight

Mortality is another factor which is of special interest to the grower. In Table 2 we have mean mortality percentages at the four locations. The percentage of mortality for the control group was 2.67%. Two crosses have lower mortality rates — X with 2.17% and V with 2.65%. Five others are below 4%: S, M, T, R and L. The crosses O and D are between 4 - 5%.

When we look at the mean percentages of evisceration we find that they are very much alike although this was one of the characteristics that was most variable at the four locations.

The eviscerated weight is a factor which is of major interest to the processing plant. We have three crosses that are slightly heavier than the control and they are: crosses V, S and L. The cross T is equal to the control and the crosses X and R are slightly lower.

CONCLUSION FOR THE FIRST CYCLE OF TESTING

We have compared nine crosses to a control group which was made of a very popular brand of broiler chicks of American origin. The control birds came from the same flock which was supplying a franchised hatchery. In order to find if these birds were really representative of their brand name, we included at one location a second control pen made out of birds of the same name but coming from another franchised hatchery. Results obtained in these 2 pens for all characteristics studied in this report were almost identical and this has convinced us that our birds were really representative of their brand name.

Wherever CRD was not a problem, as at location D, the control group has given a better liveweight than all of the crosses. At location B where CRD was very slight, the control group has also given a better liveweight than the best crosses. At both locations the difference in liveweight was in the order of .2 lbs.

Whenever CRD was a real problem our control group has given results inferior to those of the best crosses. These differences were large enough at the two locations for the control group to have a mean liveweight lower than some of the crosses.

The percentage of evisceration was quite variable but in the cumulative results some of the crosses were slightly better than the control.

As for mortality, the control gave some very good results but there again some of the crosses were just as good or even a little bit better.

Finally, when we come to the classification of eviscerated birds, at least five crosses have given better results than that of the control.

We started this project with a very definite purpose. We wanted to find one or more crosses which would give broiler chicks of equal or better value than that of the control. *After only one cycle of three-way crosses we have found four or five crosses that can give economical results comparable to the control.*

One of these crosses, group V, according to the cumulative results of this project, seems to be slightly superior to the control. It gave a better liveweight, a better eviscerated weight, a slightly inferior percentage of mortality, and a much better classification. As for feed conversion, it is only .02 behind the control and for the percentage of evisceration, it is only .1 lower than the control. Finally, the difference in weight between males and females in this cross is smaller than the difference found in the control.

We sincerely think that we have in our hands a certain number of strains that we can still improve by selection. By repeating some of our original crosses and by adding some new ones we feel confident that we can, in the next cycle, equal or even surpass the control in all kinds of environments. Therefore our next cycle will consist of crosses V, X, S, T and R and we will have four or five new three-way crosses to test.

There is still a large set of data that are of highly economical importance that we were not able to supply this year due to some difficulties in housing and in disease control. Before we are sure that the chicks we produce are of competitive value in broiler production, we must be able to state approximately the cost of production of these chicks to the hatchery. There again this cost must be equal or lower than the cost of chicks of American origin. To appraise this cost we must know exactly the number of eggs laid by the female in the final cross, the feed conversion for these eggs and also the percentage of hatching. We hope to have all this information in our next cycle. The partial information that we were able to secure in the first cycle seems to indicate that there is no serious problem on the female side. The males could be improved as to their fertility.

SUMMARY

Starting with five female strains and three male strains, we made up in the first cycle nine three-way crosses that we have compared at four different locations to the same control group made out of a very popular brand of broiler chicks of American origin. One of these crosses has given superior results for a series of economical characteristics. Four others have given results judged to be of equal value to the results of the control.

In an environment where CRD presents absolutely no problem, the control group seemed to be slightly superior to the best of our crosses.

• • •

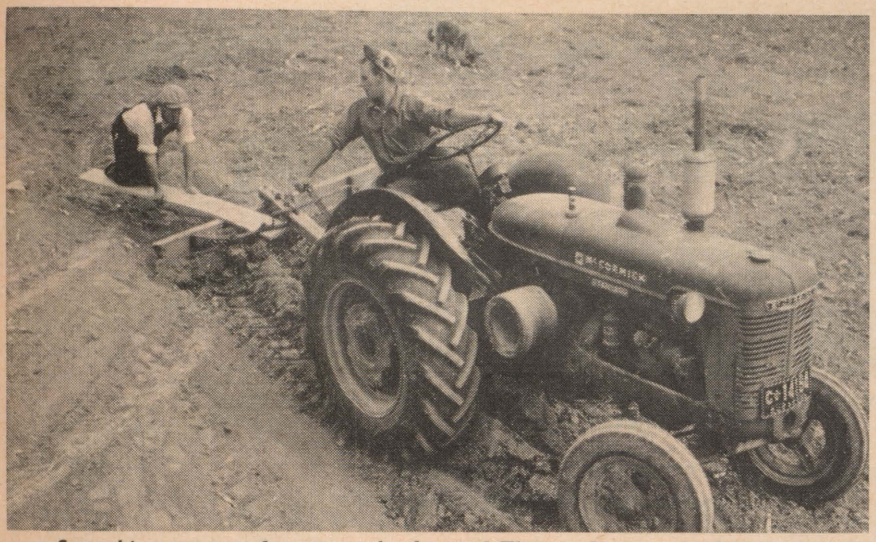
NOW IS THE TIME TO LIME

For best results lime should be applied in the fall after ploughing is completed. If lime is put on before ploughing, it will be turned under too far for it to do its proper work.

Lime must penetrate several inches of the top soil to neutralize the acids. It cannot do this if it is ploughed under as it will not work its way to the top. Lime also requires several months to accomplish its work. Do not lime just before seeding. Best time to lime is after ploughing when the fields are still dry enough to carry a truck.

J. ELLIOTT

THE FAMILY FARM
PUBLISHED IN THE INTERESTS OF THE FARMERS OF THE PROVINCE
BY THE
QUEBEC DEPARTMENT OF AGRICULTURE



Smoothing a water furrow on the farm of Thomas Duncan, at Ormstown, Chateauguay County. (Photo by Ciné-photo).

Compiled by T. Pickup, Agronome, of the Information and Research Service, Quebec Department of Agriculture.

SURFACE DRAINAGE BY LANDS AND WATER FURROWS

Soil drainage has always had important influence on the fertility of cultivated land. From time immemorial men have had to intervene in the natural course of events in order to control the amount of water available to the plants. The extent of this intervention depends on such factors as rainfall, the texture of the soil, and the environment.

A plant needs a considerable quantity of water in the course of a growing season for its normal growth and development. However, roots need oxygen as well as moisture and, if the soil is very wet, there may be too little space left in it for air. In such cases, the excess water must be removed.

In level country such as is found in the Montreal district, in the valley of the Richelieu and many other places, the soil is drained cheaply and very effectively by a method of ploughing the fields in wide, mounded strips or "lands". By this means, heavy soil can be drained very satisfactorily: not only does this system allow surface water to run off rapidly, but it also helps to lower the level of water in the soil.

Without describing this method of ploughing in detail, Mr. Paul Robert of the Provincial Field Crops Service, gives the three basic principles, as follows:

1) There must be an even number of lands;
2) All lands must be of the same width;
3) The location of the dead furrows should not be changed.

For wide lands such as this to be fully effective, their surface must be even, with a reasonable fall from the centre or crown to the middle of the dead furrow (about 18 to 20 inches). In addition, it is necessary that the lands be intersected by water furrows, deep enough to drain the dead furrows effectively and sufficiently sloping to allow heavy machinery to be used without too much inconvenience.

Lands may be 50 to 80 feet wide or even wider. Many farms have fields which are 1½ linear arpents (or 288 feet) in width. These can be conveniently ploughed into four lands, each about 72 feet wide. It is possible to give the lands the desired mounded shape by using the so-called "Richard" system of ploughing (as described in Bulletin 149 of the Quebec Department of Agriculture, "Farming for Permanent Profit"): this system involves changing the position of the crown at each ploughing. In many cases, however, it is preferable to mound the lands with the help of a heavy machine such as a bulldozer with an adjustable blade, or a scraper. After the lands have been mounded by machinery, it is easy to maintain their shape by applying the principles of the Richard system of ploughing.

Since the coming of the tractor and the use of heavy machinery, drainage is more necessary than ever, although many farmers do not seem to be aware of the fact. These machines take much of the drudgery out of farming but they also increase costs per acre. It is thus necessary to obtain the heaviest yields possible by providing the plants with the best of growing conditions.

Moreover, excess water also has to be removed from the soil so that mechanised farming operations can be carried out without undue delay. Thus, wherever this system of wide, mounded lands may prove useful, it should be adopted. If this were done, the soil would be drained better and we should not need to be afraid of wet seasons like the present one.

FALL PASTURING OF LEGUMES

With autumn just around the corner, it is time to think about making sure that hay and pasture legume plants — especially Ladino clover and alfafa — shall live through the winter and continue to make good growth.

During the month of September Ladino clover makes its reserve supplies of nourishment and stores them in its roots. It is therefore important to stop grazing at this time in order to give the plants a better chance to survive our harsh winter and to get off to a vigorous start with the return of the growing season the following spring. Suitable commercial fertilizers, if needed, can be spread during this fall resting period. If Ladino clover makes good growth at this time (during September) light grazing may be allowed in October, by which time the processes of growth and storage of nutrients in the roots will have slowed down.

For the same reasons as just cited for Ladino clover, late cut-

(*Continued on page* 11)

HORSES ARE STILL NEEDED

It may pay you to breed a few.

Nowadays most people tend to think of the horse as a kind of gadget, more or less on a par with some of our modern technical equipment but not up to playing a really important part in the agricultural development of the Province of Quebec. However, this attitude is open to serious question and we might well live to regret it one of these days.

During the past fifteen years or so, our agriculture has been following a trend of practically uninterrupted change and development. Does this mean that the use of the horse for draft purposes is out-of-date? Mr. J. A. Guimont of the Quebec Department of Agriculture definitely thinks otherwise. He adds that for many farmers the horse remains less expensive than the tractor and that those who have continued to operate with horses, either alone or in conjunction with a tractor, are now being rewarded for their foresight.

Restricting oneself exclusively to horses as a source of traction on the farm supply because one happens to like them better than tractors is not very sensible. On the other hand, it is also absurd to stop using horses altogether because one feels happier driving a machine, even though it should prove much more expensive.

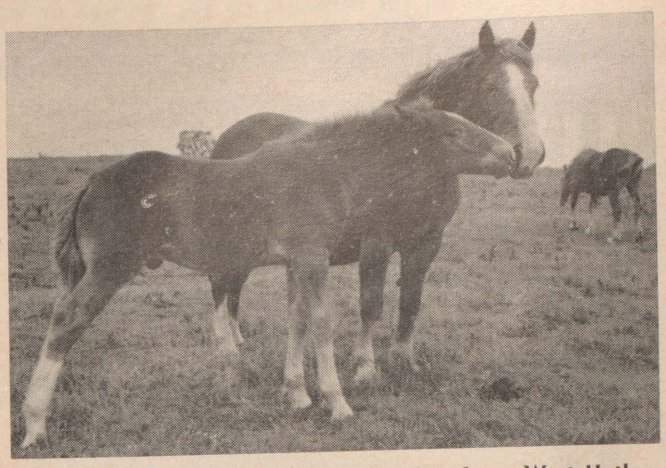
There are many possible benefits for farmers who keep horses and particularly for those who keep a few brood mares. It may prove quite profitable for a farmer to raise one or two foals a year, especially at the present time when horses of all sorts (and, often enough, past their prime) are fetching very good prices, in season or out of season, as a result of the very limited numbers which are being offered for sale.

People vie with one another in pointing out that with a tractor it is frequently possible to carry out some urgent tillage or harvesting operation more quickly and promptly. To be fair, however, they should also point out that sometimes overabundant seasonal rains make it necessary to fall back on the help of the horse to accomplish a task which would otherwise simply not get done.

However, says Mr. Guimont, there is nothing to be gained by criticizing either the horse or the tractor. Every farmer must suit his methods to his own particular problems and study how he can make the best use of horses or tractors (or both) so as to cut his operating expenses to a minimum and at the same time improve the quality of his produce.

But most important of all, at the present time is to ensure the maintenance of our horse population at its present level and increase our annual yield of foals, so that those who will eventually need

(*Continued on page* 11)



Heads up! Belgians on the Edward Detchon farm, West Hatley, Stanstead County. (Photo by Ciné-photo).

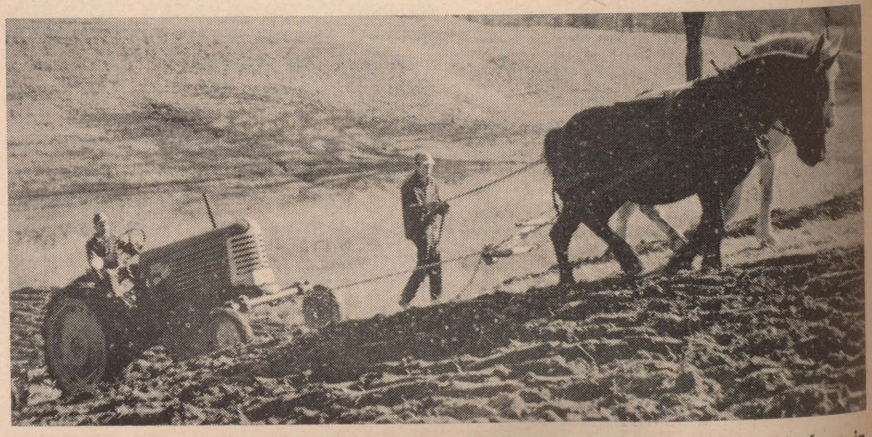
This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

GRANTS FOR THE BREEDING OF WORK HORSES

The following forms of assistance are offered to farmers of the Province who wish to breed horses:

1. **Inspection and classification of stallions;**
2. **Grants for the purchase of approved stallions (up to a maximum of $150 for stallions with an "A" rating, and a maximum of $100 for those classed as "B");**
3. **Maintenance grants for approved stallions, based on the number of foals sired: (for class "A" stallions, $9 for each of the first 10 mares got in foal and $3 for each of the following 20: for class "B" stallions, $2 for each mare got in foal, up to a limit of $100). Equal grants, in this case, may be paid CONCURRENTLY by the Dominion Department of Agriculture;**
4. **Grants for the purchase of approved purebred mares (up to a maximum of $60 per head).**
5. **The placement of fillies in settlement districts.**

Further details of these policies will be supplied by the "Horse Division, Livestock Service, Quebec Department of Agriculture, Parliament Buildings, Quebec."



Ubald Langlois of St. André Avellin makes use of horses and tractor on his farm in the Laurentians. (Photo by Ciné-photo).

LIST OF PUBLICATIONS

Available from the Information and Research Service
Department of Agriculture, Parliament Building, Quebec

BULLETINS

22 - Pastures for Quebec.
115 - The Vegetable Garden.
116 - Swine Feeding.
117 - Contagious Abortion.
124 - Spraying the Commercial Orchard.
128 - Green houses, Beds and Shelters.
149 - Farming for Permanent Profit.
154 - Twenty-Five Hardy Perennials.
159 - Beef Cattle Production.
165 - Guide for the Protection of Ornamental Plants.
166 - The Value and Utilization of Honey.
167 - Horticultural Exhibitions.
169 - Maple Sugar Industry in Quebec.
174 - Good Seed for Better Field Crops.

LEAFLETS

2 - Nature and types of Soil.
3 - Land drainage.
4 - Fertilizers.
5 - Pastures.
6 - The hay crop.
7 - Grain crop.
8 - Corn and roots.
9 - Rotation and cropping plans.
10 - Composition of feeds.
12 - Dairy herd improvement through feeding.
13 - Dairy herd improvement through breeding.
15 - Sanitation.
16 - Disease prevention and control.
17 - Testing cows for milk and butter fat production.
18 - Livestock marketing.
21 - Feeding the flock for specific purposes.
22 - Culling and breeding practice with poultry.
29 - Irrigation on Flue Cured Tobacco Farms.

HORTICULTURAL LEAFLETS

3 - Asparagus.
4 - Annuals for Summer Bloom.
6 - Hotbeds.
9 - Shrubs.
10 - Trees.
11 - Lawns.
12 - Onion culture.
14 - The Growing of flue-cured Tobacco.
17 - Tomato culture.
18 - Cucumber culture.
19 - Wax or Butter Beans.
20 - Rose culture.
24 - House Plants.
25 - Rock Garden.
30 - Ornamental Conifers, Shrubs & Trees of the P.Q.
32 - Practical Methods for Waxing Turnips on the Farm.
34 - Cherry Wine.
37 - Mushroom Culture.
42 - Maple Recipes.
51 - Potatoes in the Kitchen.

MISCELLANEOUS

202 - Quebec Society for the Protection of Plants.
203 - Annual Report Pomological and Fruit Growing Society.
209 - The Agricultural Co-operative.
224 - Farm Bookkeeping ($0.10 a copy).
236 - Turkey Raising.
256 - Poultry house for 100 birds.
I.R. 7 - Beware of Grasshoppers.
I.R. 46 - Recommendations of the Quebec Fertilizer Board.
G.C. 32 - Recommendations of the Quebec Seed Board.
- Agriculture in Quebec.
- Recipes to relish a luscious fruit (APPLES).
- Salads.
- Strawberry (recipes).
114 - Why and how to raise good Veal calves.
6 - Lovely Plants and attractive Windows.
50 - Army Worms Control.

GUIDES
I.R. 35 - Stages of Apple Bud Development.
I.R. 38 - Protection Guide for Cereals.
I.R. 36 - Orchard Spray Manual.
I.R. 40 - Spray Guide for Apple Trees.
P-253A - Supplement to the Spray Guide for Apple trees.

ACTS CONCERNING AGRICULTURE

226 - Acts concerning Agriculture ($0.75 a copy).
1 - An Act respecting Farmers' Clubs.
2 - Canned Foods Act and Regulations.
4 - An Act respecting Cooperative Syndicates.
5 - Act Respecting Cooperative Agricultural Association.
8 - An Act respecting Milk and Dairy Products.
9 - An Act respecting Certain Abuses Injurious to Agriculture.
10 - An Act respecting Certain Abuses Injurious to Agriculture.
11 - Act on Agricultural Products and Regulations concerning Sales of Fruits and Vegetables.
12 - Agrictultural Products Act.
13 - Regulations concerning the Payment of Milk and Cream in Factories.
15 - An Act respecting Animal Health Protection.
16 - Noxious Weeds Act.
18 - Concerning the Dairy Industry in the Province.
20 - Concerning certain regulations enacted under the Agricultural Products Act.
23 - Act on Agricultural Products Regulations concerning the Grading and Sale of Maple Products.
24 - Act and Regulations relative to the Grading and the Sale of Dressed Poultry.
25 - An Act Respecting the Protection of Pure bred Cattle.
26 - Act Respecting Abuses Injurious to Agriculture.
32 - An Act Respecting Societies of Patrons of Dairy Product Factories.
37 - Concerning the Regulations relative to Avian Pox.
39 - Concerning the Regulations relative to infectious laryngotracheitis and infectious pneumo-encephalitis (Newcastle disease) of poultry.
41 - An Act to protect the dairy industry in the Province of Quebec.
43 - An Act respecting Agricultural Societies.

HORSES . . . (*from page* 10)

horses and want to buy them will not find the market unsupplied. We must safeguard what we still have left of our draft horses.

Last but not least, it would be wise to remember that such incentives as are offered by the government to encourage the breeding of horses can only serve to relieve the situation temporarily. The burden of the task must be borne by the farmers themselves. It is upon them that we must rely in the long run to realize the pressing need for more horse breeding and, so doing, to depend on their own resources.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

FALL PASTURING . . .

(*from page* 9)

ting and close grazing of alfalfa should also be avoided during September. Since red clover usually has only one good cropping season, livestock should be prevented from grazing it after the grain crop has been harvested and, at the same time, from trampling it when weather conditions have softened the ground. By doing so a reduction in the hay crop may be avoided the following season.

Mr. J. Bilodeau of the Field Crops Service of the Quebec Department of Agriculture considers that some care should also be taken with bird's-foot trefoil even though this legume is somewhat less vulnerable during the month of September.

The time to lime is N-O-W!

Finish Market Lambs

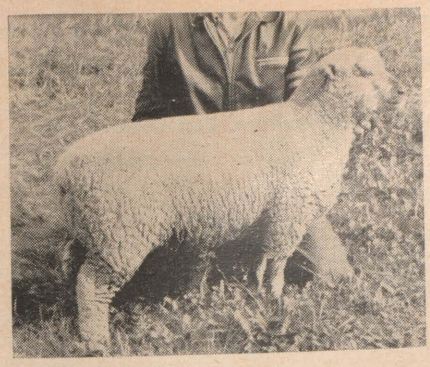
In Quebec about 60% of our annual crop of lambs reaches the market between the 15th of August and the 15th of November. This means that there is competition, and thus producers who hope to get the best prices should market lambs which meet the needs of consumers. There is little doubt that the poor quality of too many of the animals which are marketed explains why little lamb is eaten in Canada.

In 1957, of 93,394 lambs sold on the hoof, scarcely 32% were classed as good. The rest were either common lambs (39%) or uncastrated (28.4%). These figures show that far too many farmers do not understand how important it is for them to castrate their lambs and dock their tails. These two operations would assure them of animals of better quality and therefore of higher prices on the market, and would also save their ewe lambs and ewes from being bred by ungraded rams at unknown and inconvenient dates.

After he has carefully selected his animals, Mr. Marcel Tremblay of the Q.D.A. advises the producer to send to market only lambs which weigh between 85 and 100 pounds and have reached a satisfactory degree of finish. Those which are not yet ready for market should be put onto good pasture and given a daily ration of grain, consisting of one part of corn or barley, one part of oats, and one part of wheat bran. This is a cheap and quick method of finishing lambs for sale. Briefly, when marketing his lambs, a good shepherd makes two or three different shipments (depending on the condition of his flock), selecting well-finished animals each time.

When shipping lambs to market, the owner should insist on being paid according to the official grades. By doing so, he will make sure of receiving full value for every lamb sold. He will also be helping to encourage the raising of lambs of better quality and hence stimulating the popular demand for this kind of meat.

Producers are reminded that the government, in order to promote



A prime market lamb brings top price.

the production of better lambs, has set a guaranteed support price for lambs graded "Choice" (A-1) and "Good" (B-1). This price is established at $19.35 per 100 pounds live weight, F.O.B. Montreal. In addition, starting on the 14th of August, the Dominion Government will grant a premium of $2 for each lamb grading A-1, and of $1 for each lamb grading B-1. These premiums are paid to producers in the same way as those on hogs.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

BEWARE OF DAMP GRAIN

The warm, wet weather which has generally prevailed since the middle of July has greatly encouraged grain growth. Unfortunately, in many districts, storms accompanied by strong winds have battered down the crops at the time when they were most easily damaged and have caused a considerable amount of lodging.

Lodged grains do not mature evenly and are always difficult to harvest. Because of this, Mr. Paul Methot of the Provincial Field Crops Service recommends that they be given extra attention. As in the case of grain harvested before it is fully ripe, grain from lodged fields should always be spread in a thin layer on the floor of a building in which a good current of air can be maintained. Now and then (fairly often) the temperature of the grain at different places in the layer should be felt with the hand. If it is above normal, the grain should be stirred with a shovel so that the air can get into it. This will check fermentation.

Sometimes the crop contains a

(*Continued on page* 13)

Rules for picking apples have changed little in 10 years. Pick when ripe, well-sized. (Cinéphoto).

PICK AND GRADE APPLES WITH CARE

Quebec apples, particularly those of the McIntosh variety, have won a very important place on most markets. In spite of this, growers should still take care not to spoil our own local market by picking their apples too early and offering them for sale while they are not yet mature.

In order to be graded as "Extra Fancy", "Fancy", or "Commercial" ("C"), all apples must be ripe, clean, sound, well shaped, hand picked, of uniform size and variety. These grades differ from one another in their standards as regards percentage of colour required and amount of injury tolerated, as laid down in the regulations.

Apple growers should bear in mind that the percentages of colour stipulated are only minimum legal requirements and that, when purchasing apples of red varieties, especially McIntosh, buyers tend increasingly to look for more colour and may ask for as much as 75% of red.

It is only necessary to watch shoppers at the fruit counter of a super-market rummaging about amongst the transparent bags of apples, to be convinced that they are prepared to go to any lengths, even as far as the bottom of the pile, to find apples which look a little redder.

Mr. S. Deguire of the Quebec Department of Agriculture strongly advises growers to save all this trouble and, at the same time, to save their fruit from being bruised and depreciated by the rough handling of impatient customers, by waiting until their apples are ripe enough to be offered for sale to a discriminating public.

LIGHTS FOR LAYING BIRDS

THE use of artificial lighting is common on large poultry farms. During the rearing period, artificial illumination is limited to dim lighting at night to prevent the birds from crowding, but laying flocks definitely need extra light in order to maintain normal production.

It is recommended, as a general rule that, during every month of the year, laying birds should have light—natural or artificial—so that they will be active for 14 hours each day. It has been found that additional lighting given in the morning is more profitable than that given in the evening. Mr. Gérard Simard of the Quebec Department of Agriculture recommends that one 100-watt electric light bulb be provided for every one hundred laying birds. Lighting will be more satisfactory if the bulbs are fitted with suitable reflectors and arranged so as to light perches and feed-hopper as well as the centre of the poultry house. Lights are arranged in rows at intervals of ten feet.

Some poultrymen prefer to increase the duration of lighting as the laying period progresses. This method consists in beginning with a total of six hours of light a day when the birds first start laying and increasing this daily period by eighteen minutes every week until the end of the laying period.

It is very important to keep light bulbs clean and to see that the lighting is uniform and regular. Dark and gloomy poultry houses should be well lit by an adequate electrical system, especially on sunless days. Lighting is a practical means of increasing egg production and profits.

This page supplied in the interests of the Family Farm by the Quebec Department of Agriculture.

BEWARE . . . (*from page* 12)

very large proportion of immature weed seeds and all sorts of other green stuff. In such cases, put the grain through the threshing machine again, taking care to increase the current of air or run it through a fanning mill, which will rid it entirely of the weed seeds and other green matter that are the commonest causes of heating.

Grain harvested with a combine is always more liable to heat and therefore greater care should be taken with it.

ROOM FOR MORE QUEBEC EGGS

AT the present time, the poultrymen of Quebec are losing millions of dollars because the number of eggs they produce still falls far short of the consumers' requirements. The lag between production and consumption now stands at 54%, the deficit being made up by imports of eggs valued at nearly $15,000,000. This situation could be corrected if poultrymen, mainly in those regions which are deficient, would gradually increase egg production by ten per cent per year.

Besides this, Mr. Emile Simard of the Quebec Department of Agriculture points out that there is another shortcoming which calls for attention. This is in the matter of marketing. Egg-grading plants still only handle half of the total production: specialized poultrymen as well as farmers with small flocks are selling their eggs directly to wholesalers or retailers. In many cases, these producers deliver to the candling and grading plants only the surplus eggs which they cannot sell directly or else they only send them there when the market is unfavourable. Under these conditions, the grading centres cannot render the services expected of them.

Thorough, systematic and profitable poultry farming does not leave the poultryman an opportunity to attend to the grading, handling and delivering of eggs. Problems of production and the present tendency towards integration call for new outlooks and methods. It is more economical for the producers to devote all their time to the management of their flocks and to entrust the marketing of eggs to the grading plants.

HOW TO KEEP FOXES AWAY FROM POULTRY PENS

IN many districts, foxes are still a menace to flocks of poultry out on range, even though programmes for their extermination have given good results. Mr. Bernard Chagnon of the Quebec Department of Agriculture suggests some practical ways of keeping foxes away.

One method consists in surrounding the poultry pen with an electric fence made up of two strands of either No. 10 wire or barbed wire, the lower strand seven inches from the ground and the second one six inches above the lower. This fence is set up outside the usual wire-netting enclosure of the poultry pen. The grass is cut beneath it and the underlying ground sprayed with a mixture of equal parts of used motor oil and coal-oil, this treatment being repeated two or three times during the season.

A good watch-dog may prove to be a valuable safe-guard and it is also suggested that a light be hung out at night in such a way that it moves with the wind.

KEEP EGGS FROM GETTING DIRTY

It is better to prevent eggs from getting dirty, by taking certain special precautions, than to have the rather disagreeable and tedious and laborious job of cleaning them after they have been fouled. Particularly at the beginning of the laying period, poultrymen should pay extra attention to the conditions which safeguard the cleanliness of eggs. Mr. Jules Brosseau, of the Quebec Department of Agriculture, gives the following instructions for the production of eggs:

1. Provide adequate nesting space, at the rate of not less than one individual nest for every five laying birds, or community nests at the rate of one square foot per five birds;
2. Keep the nests clean and well padded;
3. Keep broody hens out of the nests;
4. Cover the roosts with wire-netting so that the birds cannot get onto the droppings;
5. Remove patches of damp litter from the floor;
6. When collecting the eggs, use clean receptacles to put them in;
7. Collect eggs at least three times a day, in order to avoid breakages;
8. Keep the litter dry by airing it regularly and seeing that the poultry house is well ventilated;
9. Laying birds should be kept in complete confinement.

Eggs commonly get soiled by the dirty feet of the birds; that is why it is important to have litter quite dry and about six inches in depth. Besides turning the litter to air it, it is advisable, in many cases, to add slaked lime to it, in order to reduce the humidity. Apart from lowering the grade of the eggs, dirt on the shell may produce bacteria which penetrate and affect the quality of the contents. For these reasons, wise poultry management includes measures designed to keep eggs clean.

FARMERS IN THE NEWS...

DR. ERNEST MERCIER ON AGRICULTURAL EDUCATION RESEARCH

"It is becoming a general basis of policy and action, in the United States and Canada, that research and graduate education are inseparable functions of universities, and that, in graduate education, the training of research workers involves research. The process of graduate education in agriculture depends on research just as much as upon teaching; and there is an error in trying to think of them as different or opposite forms of activity. The two kinds of activity reinforce each other and each is weakened when carried on without the other.

Agricultural research can be, and is, carried on without much connection with graduate education but we cannot turn the matter around and argue that graduate education can be separated from the discipline of research. Programs in graduate education of agricultural colleges and faculties of agriculture should include experience in research, whether the student is headed for academic work or for industrial or governmental research.

In the past, *agricultural research* was considered to be the responsibility of Universities and of the Federal Government, and *education* a provincial responsibility. It is generally admitted that Agricultural Colleges and Faculties should provide strong research and educational programs to train capable young men and women who will be the agricultural leaders of the future. Our research specialists require training in the methods of research. They can only acquire an intimate knowledge and appreciation of fundamental agricultural problems by learning how to set about dealing with these problems. Such experience will increase their effectiveness.

. . . the Faculty of Agriculture of McGill University is not limiting itself to teaching but is devoting time to research for graduate education purposes.

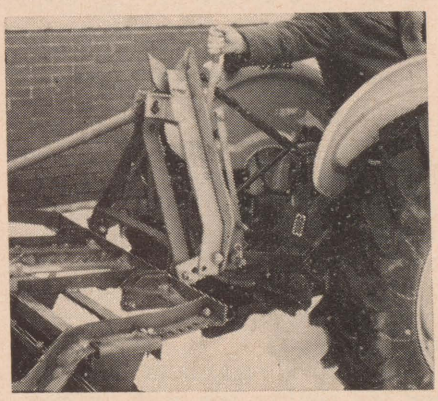
This work has been supported to some extent by the Department of Agriculture of Quebec which, besides granting to Macdonald College annual subsidies for maintenance and research projects, still maintains on the College farm a station for the multiplication of new varieties.

Since nothing in the British North America Act hinders either the Federal or Provincial Governments from conducting research and experimental work, we need only be concerned with the ways and means by which the relationship between the governments can be made more effective, more meaningful and more constructive. If responsibility for research support must be and is shared by Federal and Provincial Governments, it needs coordination and correlation to be fully effective.

In its support of agricultural research, the Quebec Government relies on the judgment and advice of members of the Agricultural Research Council. Decision to support research is based on the merits of each case. This project method of research support has real merits, and provides for the full cost of the research which is supported. It is believed to be better than the system of making large general grants for all purposes to all institutions. Research projects which provide legitimate part-time work for degree candidates also make a very valuable contribution to good education and research training . . ."

from remarks to Canadian Society of Agronomy.

INSTA-HITCH



Shown above is a hitching system called Insta-Hitch developed by McKee Bros. Ltd. at Elmira, Ont. Manufacturer claims it can be used on any piece of equipment regardless of make, and that it will cut hitching time to 30 seconds. It can be used in front-end hitching as well as rear-end.

CALF CLUB CHAMPS

Miss Brenda Frizzle of Brome Calf Club won top honours with the highest points in judging, technical questions, personality and the work she has done in the livestock breed club. Competition was keen as there were 220 juniors competing at the Sherbrooke Fair and all were finalists in their own local competition.

Richard Tremblay of the Coaticook Club was grand champion showman and runner-up was Lucienne Pelletier also of the Coaticook Club. Robert Clement of Sherbrooke had the highest score for the judging of dairy cattle.

The 11 Calf Club members who will represent the Province at the Royal Winter Fair are Brenda Frizzle, Brome; Robert Clement, Waterville; Georgette Larose, Barraute; Rejean Marquis, Isle Verte; Roger Bousquet, Granby; Gordon Bustard, Ormstown; Daniel Fecteau, Ste. Marie; Wallace Barber; Shawville; Benoit Leger, Vaudreuil; Suzanne Begin, Coaticook; Kenneth Kilgour, Shawville.

NEW YORK MAPLE PRODUCERS VISIT QUEBEC

New York maple syrup producers visited some Quebec sugar bushes recently on a tour arranged by New York State Agricultural College at Ithaca. Producers stopped first at Norval and Mrs. Clarence Blair's sugar bush, Franklin Centre where 6000 buckets are hung, on a 37 acre bush. This was followed by a tour of Floyd Stevenson's 40 acre bush which produces about 600 gallons of syrup. Stop number 3 was at Roy Blair's where planting of maples had been carried out in 1945 with good results. The young maples were taken from the edge of the mature bush. Final stop was at Keith Greig's 100 acre bush which yields about 300 gallons per year.

The tour continued to the Morgan Arboretum of Macdonald College where research on maple sap production was discussed. Visitors were particularly interested in the experiments with sterilizing agent in tap holes to increase sap output. Tour was conducted by Prof. Jones of Macdonald.

GROUND HAY FOR PIGS

Diluting the finishing rations for pigs with ground hay increases the number of grade A carcasses despite the fact that fibrous feeds in finishing rations usually reduce the rate and efficiency of gains.

This was the conclusion reached by C. D. T. Cameron, of the Canada Agriculture Experimental Farm, Lennoxville, Que., following tests there.

Mr. Cameron said that a standard finishing ration was compared with one in which ground hay (a timothy-red clover mixture) was used to replace 25 percent of the barley meal in a similar ration. The two finishing rations, one standard and the other altered, were fed to separate groups of 24 Yorkshires, from 100 pounds to market weight.

Results showed that 92 percent of the carcasses from the herd fed the ration containing ground hay graded A compared with 71 percent of those from pigs fed the standard, or unaltered ration.

But the pigs fed the standard ration gained weight more rapidly. Daily gains, according to Mr. Cameron, were 1.74 pounds for pigs on the standard ration and only 1.5 pounds for those fed hay in the ration. This, he pointed out, means that pigs on the ration containing hay require 10 days longer to reach market weight. This extra 10 days, figured in cost of feed and labor, amounted to an increase in the overall cost of the animals of $15, Mr. Cameron said.

However, the extra premiums and returns for top grade carcasses from pigs fed the ration diluted with hay was $22.50 more than for those from pigs on the standard finishing ration used in the experiment.

ONE THOUSAND DISEASE-FREE PIG HERDS IN U.S.

More than 1,000 completely disease-free pig herds were established in the U.S. by the end of 1960. Breeding stock are removed from sows by a hysterectomy operation and thus kept free from infection. Licenses have been issued to commercial producers which will allow an annual capacity of 50,000 disease-free pigs a year. Such pigs are reaching 200 lb. live weight in 4½ to 5 months with a conversion rate of just below 3:1.

These facts were given by Dr. Alan Betts of Cambridge University, at a recent hog disease conference held at Chalmsford, England. Dr. Betts pointed out that progress in disease-free pigs in England is slower, but so far some 550 piglets have come from 60 sows in this way in the pig herd established at Cambridge University.

A growing interest in this method of raising pigs, is being shown in various parts of Canada at the present time. According to Dr. Betts, if you want complete freedom from the disease for your hogs . . . rats and birds must be kept away from the piggery, clothes must be changed before going in, and special precautions should be taken with feedstuffs.

NEW SIX-POINTS FORMULA FOR SUCCESSFUL HOG PRODUCTION

What makes a good hog man? According to a booklet just published by the Pioneer-Cafeteria people, successful hog production today depends on the following six-point "formula of objectives" which is something like a road map that identifies the main landmarks along a stretch of highway.

First objective in the formula, they say, is to average "35 lbs. total weight per litter at birth". Second objective is to average "450 lbs. total weight per litter at 8 weeks old". Third objective is to average "2,000 lbs. per litter before 6 months old".

Fourth objective is "7 litters per sow in 3 years". Fifth objective is "1 lb. live gain per 3 lbs. of feed consumed". And the final objective is "75 per cent of market hogs in the A-grade".

At first glance, some of these objectives may seem to be beyond the reach of the average hog producer, but the booklet goes on to outline a program of breeding, feeding, housing and health, which (it claims) will bring all six objectives within reach of all producers.

At any rate, it is a well-thought-out contribution to the Canadian hog-producing industry, which is currently in a state of change and reorganization, and is worthy of serious study. The title of the booklet is "Pork". Copies are available from all Pioneer-Cafeteria dealers.

AGRICULTURAL MERIT WINNER

Mr. Laurent Gauthier, St. Thomas, County of St. Hyacinthe, has won the title of "Commander" as a result of this year's Better Farming Competitions. He was awarded the greatest number of points in the contest in which there were nine entries for the Gold Medal.

QUEBEC POULTRYMEN . . .

(*from page* 5)

some are not washing them as they should.

Some integration and contract production exists in this industry and it will increase in the near future. Much of the increase in volume for the province will come from such production.

Turkey Industry

This segment of the industry is quite specialized with large units. Only 40% of Quebec's heavy turkeys are produced in Quebec, leaving tremendous room for expansion of this line of production. However, experts caution prudence in expansion of production of light and broiler turkeys as production is just about equivalent to demand at present.

Broiler Industry

Local broiler production is sufficient for needs, having doubled since 1956. This industry is highly integrated. However, low prices and high production are stirring producers to consider different types of marketing arrangement to give them some control of price and production. Many broiler hatching eggs are imported and most of the others are from American breeding. Search is being pushed for lines and crosses which will be produced locally. *Expand with extreme caution,* say experts.

In General

For the industry as a whole, the experts look for continued quality improvement and narrowing profit margins but *a good living for top-flight poultrymen.* If you don't compete in flock management, better leave the industry now. Experts want Quebec farmers to produce enough for our own consumption, but think we should increase gradually in the face of whatever competition may come from across our borders.

Have you forgotten to return your subscription renewal?
Check today. Only $2 for 3 years.

The Country Lane

FOR JUDY

My bread is raised in the wintertime
When the furnace heat is on.
The dough comes high in the summertime
On the porch in the morning sun.

And I think as I mix and knead and mold
Of my daughter across the sea.
As I place each loaf in its final fold
I'm wanting her back with me.

Shall I hope when my faithful fire is lit,
That whenever she sits alone,
The scent of bread from this oven red
Is speaking to her of home?

Nancy CUTTS,
Dunham, P. Q.

NATURE

(From lines written above Tintern Abbey)

These beauteous forms,
Through a long absence, have not been to me
As is a landscape to a blind man's eye:
But, oft, in lonely rooms, and 'mid the din
Of towns and cities, I have owed to them,
In hours of weariness, sensations sweet,
Felt in the blood, and felt along the heart;
And passing even into my purer mind,
With tranquil restoration:—feelings too
Of unremembered pleasure: such, perhaps,
As have no slight or trivial influence
On that best portion of a good man's life,
His little, nameless, unremembered, acts
Of kindness and of love.

For I have learned
To look on Nature, not as in the hour
Of thoughtless youth; but hearing often times
The still, sad music of humanity,
Nor harsh, nor grating, though of ample power
To chasten and subdue. And I have felt
A presence that disturbs me with the joy
Of elevated thoughts: a sense sublime
Of something far more deeply interfused,
Whose dwelling is the light of setting suns,
And the round ocean and the living air,
And the blue sky, and in the mind of man:
A motion and a spirit, that impels
All thinking things, all objects of all thought,
And rolls through all things.

And this prayer I make,
Knowing that Nature never did betray
The heart that loved her; 'tis her privilege,
Through all the years of this our life, to lead
From joy to joy: for she can so inform
The mind that is within us, so impress
With quietness and beauty, and so feed
With lofty thoughts, that neither evil tongues,
Rash judgments nor the sneers of selfish men,
Nor greetings where no kindness is, nor all
The dreary intercourse of daily life
Shall e'er prevail against us, or disturb
Our cheerful faith, that all which we behold
Is full of blessings.

—William WORDSWORTH

MONTREAL MOSAIC

I'll take you where Italian signs
Will greet the passerby,
Where Greek and other languages
Will fascinate the eye.

Divergence architectural
Apparent night or day;
This dome, that spire, a quaint ruelle
'Neath boulevard highway.

The Anglo-Franco culture chain
Adds links from other lands,
Enriched by art, by song refrain,
A heart that understands.

No melting pot this metropole
But a mosaic fair,
An active city with a soul,
A blending rich and rare.

Olive Sanborn RUBENS
Montreal

EXTRACT FROM THE DECLARATION OF INDEPENDENCE

We hold these truths to be self-evident, that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these, are life, liberty, and the pursuit of happiness. That, to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that, whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and to institute a new government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem **most likely to effect their safety and happiness.** Prudence, indeed, will dictate that governments long established, should not be changed for light and transient causes; and, accordingly, all experience hath shown, that mankind are more disposed to suffer, where evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But, when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security.

Story of a M-M-M O-O R-R G-G U-U E-E !

ARTHUR GRAVELLE

This man left his son a living morgue and the secrets of 500,000 families.

In our own home, in Renfrew, Ontario, back in the early eighties, a miniature historical society was formed. Its membership never reached more than seven, but each member of the family was asked to contribute and to record what they could to form a treasure of information. The president, the original founder, the main organizer, the one who inspired life and action amongst the members of the society, was my father, the late Arthur Gravelle. Being himself a born student, a mathematician, a chess champion, a lecturer, a sleight of hand entertainer, an opener of all unruly safe combinations, a musician, an inventor, he found time to publish a weekly newspaper, to serve on local school boards, on the municipal council, as Mayor of his town for two terms, as Justice of Peace for South Renfrew and also to start and develop his special hobby, the collecting and recording of genealogical and historical records, unique of its kind.

Today these records cover some five hundred thousand families, all placed in alphabetical order, cross-indexed (for the finding of allied families), generation-indexed (for going up or down the lines of lineage). They cover all families, without distinction of language spoken, of creed or of social standing, and they reach back into Scotland, Ireland, England, France, Poland and Germany, giving the dates, when obtainable, of births, marriages, deaths, as well as places of residence.

The source of information, of course, started by individual enquiries, the most rapid if not the most accurate means of obtaining records of facts. To this was added information obtained through the press from obituary and marriage notices. Then the above was verified by consulting Municipal, Provincial and Church Records, as well as records of Government Land Grants and registration of properties and the Federal Census taken each ten years and preserved in the Archives at Ottawa. To this was added information obtained from cemetery records and read from cemetery tombstones. Several of the original records from which data was obtained have since been destroyed by fire, thus making these genealogical records of much more value.

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(Rev.) Jos. E. Gravelle,

The Pontiac Historical Society

The author of this article, Rev. Jos. E. Gravelle, is the highly-respected Parish Priest at Otter Lake, Quebec, and an outstanding Genealogist. He has continued to compile the records begun by his father over 90 years ago.

In our very home from early childhood, we had what we called "the morgue", the coffins in which were laid away for identification those thousands of persons, most of whom were long dead and forgotten. Yet what pleasure we have witnessed on many of the occasions, when some one, even a total stranger to us, dropped in and after a few moments research identified from amongst our dead a grand or great-grand parent, a distant cousin, a long-lost relative lying there for years, unclaimed, totally forgotten.

Persons contemplating travel to distant points in Canada, in the United States, in Europe, young men called to serve overseas in the recent wars, were enabled to ascertain where they would find ancestors or relatives whose tombs they would like to see or whom they might like to visit.

People are becoming more and more interested in tracing their lineage now that they can get help and advice on how to proceed. Throughout the United States today, every big public library has its section devoted to Genealogy, where enquirers can obtain information on their own families and on those of their friends. Canada is a little behind in this respect but a start has been made. People are asking for volumes supplying this information and our libraries are meeting this demand.

To realize the great interest being taken in historical and genealogical research, one has only to visit the students' study room at the Federal Archives, next to the Mint in Ottawa. Of course you must obtain a permit during office hours and request the books and films you wish to consult if you wish to enter the study-room at night. There you will find a room full of students, amidst the tapping of typewriters, searching, into the night. We find here scholars preparing their thesis for University degrees, members of historical societies, individuals tracing up their line of ancestors or of relatives. The personnel in charge in the documentary, library or film departments are very willing to answer all enquiries and to assist in this work.

The Women's Institute established in Chisholm Township a few years ago has found that the project that has created the most interest amongst its members was "The Family Book". To this each member was invited to write a

(*Continued on page* 19)

CANADA FOOD GUIDE

Many Canadians do not eat proper quantities and kinds of food. Do you?

CANADA FOOD GUIDE

These foods are good to eat.
Eat them every day for health.
Have three meals each day.

MILK

Children (up to about 11 years)	2½ cups (20 fl. oz.)
Adolescents	4 cups (32 fl. oz.)
Adults	1½ cups (12 fl. oz.)
Expectant and nursing mothers	4 cups (32 fl. oz.)

FRUIT

Two servings of fruit or juice.
Include oranges, grapefruit or tomatoes three times a week.

VEGETABLES

One serving of potatoes.
Two servings of other vegetables, preferably yellow or green and often raw.

BREAD AND CEREALS

Bread (with butter or fortified margarine).
One serving of whole grain cereal.

MEAT AND FISH

One serving of meat, fish or poultry.
Eat liver occasionally.
Eggs, cheese, dried beans or peas, may be used in place of meat.
In addition, eggs and cheese each at least three times a week.

VITAMIN D

400 International Units for all growing persons and expectant and nursing mothers.

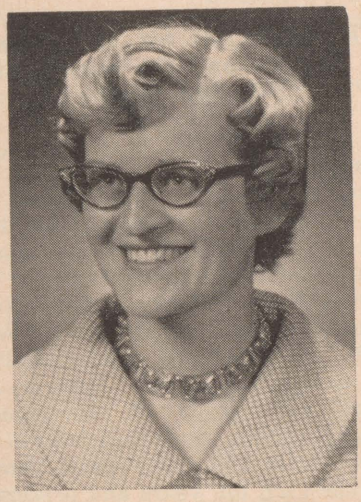
APPROVED BY THE CANADIAN COUNCIL ON NUTRITION, 1961.

Poor choice of food prevents many Canadians from enjoying the health they could have. In a growing and prosperous country such as Canada most people can afford an adequate diet.

Why is food so important for health? Because it is only the food we eat which gives us the necessary substances for building and repairing body tissue and for providing the energy necessary for activities. To illustrate the importance of food let us compare the human body to the engine of an automobile. If a low grade gasoline is put into a car, the car may run, but not nearly as well as it would with a high grade gasoline. If humans consume foods of low nutritional value they may stay alive but will not function as well as if their foods contained all the essential nutrients they require. The human body is, of course, much more complex than an engine, and so requires many more nutrients than does an automobile.

What then are the foods which will supply all these nutrients? To help Canadians choose foods wisely, the Canadian Council on Nutrition has compiled a food guide called Canada's Food Guide (formerly called Canada's Food Rules) which outlines the foods which will assure us the nutrients we need. The Food Guide is shown above.

Notice that the foods listed are grouped under five main headings



by Prof. ZARKADAS

School of Housesold Science

— milk, fruit, vegetables, breads and cereals, and meat and fish. Each group is equally important, and foods from each group should be eaten daily. If they are not, certain nutrients will be lacking; e.g. milk is important, even for older people, especially for its calcium and protein. A good variety of fruits and vegetables provides minerals and vitamins necessary for healthy skin, gums, bones, and other body tissues. Cereals, especially the whole grain variety, contain among other nutrients the B vitamins which are necessary for the health of the skin and for proper elimination, and meat, fish and their alternates provide vitamins, minerals and protein which are all used for building and repairing body tissues.

Looking carefully at this list of foods you may find that you do eat most of these foods daily. If this is the case, congratulations, for you are well on your way to a nutritionally sound diet, and just a little effort to include the foods you have omitted will provide you with a healthful and adequate diet.

If it is so simple to eat an adequate diet why are there still so many Canadians who do not choose the best foods for maintaining their health? This is a big question.

Many people explain that they want to lose weight and if they eat all the foods listed in Canada's Food Guide they will not be able to reduce. As a matter of fact if a person follows this Guide he (or she) could not choose a better reducing diet, *for it is this Food Guide which is used as the basis of nutritionally sound reducing diets* in all Canadian hospitals. It is the extra foods such as sugars, candies, cooking fats, cakes and soft drinks which, when added to this diet, increase the calories, with very little or no increase in its

nutritional value. Many of the quick reducing diets found in popular magazines today are so restricting in their choice of foods that they cannot possibly contain all the essential nutrients in adequate quantities, and for this reason many of these diets can be quite harmful if followed for any length of time. *The safest and most effective way to lose weight is to follow the Food Guide and skip the "extras" which add too many calories.*

A special group of Canadians who do not always choose an adequate diet are the "teen-agers". This is a very serious problem for at this age their need for proteins, minerals, vitamins is very high. Snacks at the local soda counter cut the "teen-ager's" appetite for meals. Teen-age girls wishing to keep a slim figure often cut out an essential food such as milk because they think it is "fattening". Milk is an excellent food for growth and to replace it by soft drinks is a mistake. Snacks for active "teen-agers" are *not* wrong but the wisest plan is to assure that all the essential foods are eaten, and then add snacks to this basic diet. Snacks such as ice cream, milkshakes, and hamburgers are, of course, much more valuable than potato chips, soft drinks and candy. An adequate diet for a "teen-ager" cannot be overstressed, and if good nutritional habits are acquired at this time they will usually be continued throughout life.

The cost of an adequate diet is another problem to be faced, but if a person shops wisely the essentials for such a diet can be purchased at a minimal cost. For example lean hamburger is just as nutritious as steak and is much cheaper; standard and choice grade fruits and vegetables are just as good nutritionally as the fancy grade; powdered skim milk used in cooking instead of whole milk is much cheaper; a whole grain cereal such as oatmeal is not nearly as expensive as cornflakes, rice cereals or refined wheat cereals and is much more valuable nutritionally.

Good health is one of our most valuable possessions, and with a little more care with our daily diets we can all help ourselves to better health, using Canada's Food Guide as our guide.

• • •

They always talk who never think.—Prior.

Films For Your Program

A DAY IN THE NIGHT OF JONATHAN MOLE

16 mm Black & White Sound
Running Time: 33 minutes

Produced by the National Film Board of Canada for the Federal Department of Labour, 1959

Here is a film that pulls no punches . . .

Especially damaging in the employment field, prejudice exacts its price both from the individual and from society as a whole. This is demonstrated by Jonathan Mole who, in this film, is the arch bigot.

Framed in a phantasy situation in the mythical country of Adanac, the film witnesses the testing of a new law intended to restrict employment to people of "pure" racial origin. The fallacies on which the Adanacian law is based become abundantly evident as the case proceeds. Witnesses for the Prosecution present what are easily recognizable as stereotypes of prejudice, and witnesses for the Defence counter with undeniable facts — yet, the fallacies win the day.

This film will provide discussion wherever it is shown. Discussion leader's guides are available from the Film Library for use with the film.

HOME LANDSCAPING

16 mm Color Sound
Running Time: 16 minutes
Produced by the National Film Board of Canada for the Canada Department of Agriculture, 1958

For home owners — a capsule course in home beautification . . . of wide appeal in both rural and urban areas.

If you want a *Home Beautiful,* landscaped in the most pleasing effect, and you don't know where to begin, this film will give you some helpful hints.

What kind of trees and shrubs to choose, how to soften the lines of an angular house, how to achieve color harmony and symmetry between building and environs, how to make the back patio a focus for pleasant outdoor living — these and many more suggestions are illustrated in this color film designed to help you enhance the value and get the most enjoyment out of your property.

THE CHANGING FOREST

16mm Color Sound
Running Time: 19 minutes

Produced by the National Film Board of Canada, 1958.

This film is a brief essay on the ecology of a deciduous forest area of the type found along the southern fringes of the Laurentian Shield. We see the forest as an integrated community of living things, both plant and animal, balanced by conflict as well as harmony in the never-ending struggle for survival. We see too how and why the maple, its flaming reds and yellows of autumn so characteristic of this type of forest, is best able to survive the struggle for supremacy.

All these films are in the Provincial Film Library, in the Extension Department at Macdonald College. They may be borrowed for the nominal rental of 50 cents for a black and white film — $1.00 for a coloured film — plus shipping charges.

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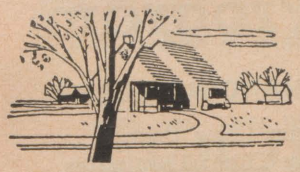
STORY OF A . . .

(*from page* 17)

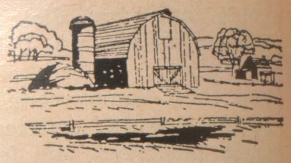
complete story on their family and their early experiences, as handed down to them by the early settlers. This book is at present in the hands of the printers and will contain a treasure of information, again showing how Genealogy holds an important place in past history.

In conclusion may I say that the interesting records compiled by the late Arthur Gravelle have been kept up to date and are now in the safekeeping of his son, Rev. Jos. E. Gravelle, now at Otter Lake, Que. They are open to inspection at any time, free of charge. If your own family is not completely there, it is because you have not yet co-operated in sending in what information you have on the different branches, as so many have done. In return for complete families sent in, you will receive the data already compiled on your ancestors. In this way we hope to create a greater interest in tracing up families and at the same time leave for future generations a rich treasure of information on the past.



The Better Impulse

NEWS AND VIEWS OF THE WOMEN'S INSTITUTES OF QUEBEC



A NEW BRANCH

Though the efforts of Mrs. Wells a new branch of the QWI has been formed at Rouyn, to be known as Rouyn-Noranda. Mrs. J. Ossington attended the organizational meeting to explain the work of the Institutes and installed the new officers. Fourteen members are only the beginning. It is expected that it will be a very large branch. The new branch officers are as follows: President Mrs. M. V. Richards, Vice-President Mrs. Leger, Secretary Mrs. Pauli, Treasurer Mrs. Barnes. Best wishes and a warm welcome to our newest branch.

Mrs. Fred Greer being presented with a Life Membership by Mrs. Harold Palmer, County President. Mrs. Greer has been a member for 19 years and has been influential in making the School Fair a success.

THE PREMATURE BABY

by Mrs. Howard CASS, Convenor for Welfare and Health

I can remember my grandmother telling about a baby being born so small that she could slip her wedding ring over his arm up to the shoulder. Descriptions of babies being put in boxes or baskets, surrounded with hot water bottles and placed in open ovens are quite vivid to me. In fact, when I first started nursing as a Public Health nurse, there were a few occasions when attending a birth in the home, I had to resort to all sorts of measures before I could possibly take the baby to a hospital. However there were always some of these premature babies that survived, and much depended on their conditions and surroundings.

When we speak of a premature baby we mean a premature birth of from six to eight weeks. Nature intends that a full term baby should be equipped to take over its own functioning of breathing, ability to suck, etc., as soon as it is born. A premature baby, depending on its time of delivery, may or may not be able to do this entirely, and a great deal of care is required. The infants are usually perfectly formed and, with all the scientific progress that has been made, the care of the premature baby has been greatly simplified, and many more are saved.

Immediately after a premature birth the baby is placed in a special infant incubator called an isolette. This incubator literally isolates the baby from constant attack of air-born infections. The flow of oxygen to facilitate breathing is constant and completely automatic. Also, the heat and humidity controls are especially calibrated to suit the needs of the infant. Everything is done for the infant inside the isolette without removing the baby even for weighing. The nurse has access to the baby through plastic sleeves on either side of the isolette that can be tightened to allow no oxygen or warmth to escape. Special scales are placed on top of the isolette and, by putting the baby in a diaper or small blanket which is attached to a hook inside the isolette, the exact weight can be determined. This is very important for the doctor to know as the rate of weight gain determines the infant's progress.

After placing the premature baby in the incubator the following 24 hours are most critical and the infant has to be watched constantly. The premature infant is not

FASHION SHOW AT NOTRE DAME DU NORD

by E. OSSINGTON

The Community Hall on the Indian Reserve at Temiskaming was the scene of a very colorful fashion show recently. This event marked the conclusion of an intensive two weeks sewing course given to 27 members of the Notre Dame du Nord WI. The instruction was given by Mrs. A. Wells and 21 different garments were modeled. These had all been completed by the members at the course.

Mrs. J. Ossington, Prov. Vice-Pres., accompanied Mrs. Wells and remained for the two weeks assisting Mrs. Wells and visiting with the Indian women. During the evening festivities a QWI pin was presented to Miss Molly Polson, the first Indian branch president. Mrs. Ossington gave the commentary on the fashions and the events of the evening were filmed.

Amongst those present were Mr. R. L. Boulanger, Regional Supervisor of Indian Affairs, Mr. Lamothe, Agent, and Miss Dulude, nurse. Mr. Boulanger and Mr. Lamothe were particularly pleased with the results of this venture and the women themselves wished it could have lasted for another two weeks. They said their husbands thought it the best thing that they had done yet, although the men vowed they were all suffering from "baby-sitting hangover".

Sewing machines were loaned for the course by the Singer Co.

Miss Hanna Smith, Argenteuil County Treasurer receiving a Life Membership from Mrs. Sharman Doig.

The Month With The W.I.

Many branches take a holiday during the summer, an explanation for the small number reporting this month. Picnics, garden parties, beach parties and other outings have been enjoyed by many. On the more serious note, the Convention is still being talked about, Senior Citizens are being remembered, plans made for Fair exhibits and the usual donations to worthwhile projects.

BONAVENTURE:

Grand Cascapedia, Matapedia and Restigouche reported.

CHATEAUGUAY-HUNTINGDON:

Dundee had an interesting discussion — "Are we losing or gaining by the switch from small family farms, to larger more mechanized farms?" **Hemmingford** made a donation towards a tape-recorder for a local boy who has been attending a school for the blind, and who is now going to college. **Huntingdon** were interested to hear of the experiences of Kathleen Reid who attended the U.N. Seminar held at Macdonald College. Aubrey-Riverfield, Howick, and Ormstown also reported.

COMPTON:

East Clifton held a card party to raise money to buy seeds for a School Fair which is being continued.

GASPE:

Gaspe heard an informative talk on the Prevention of Cancer, given by Dr. E. Coffin. A demonstration was given on the examination relative to breast cancer in women. **York** presented an autographed quilt to a member, Mrs. Wilton Miller, who is leaving to take up residence in England. Each member embroidered their name in the square they made. **Lower Eardley** sponsored the annual School Picnic. Wakeham also reported.

GATINEAU:

Received reports from Aylmer East, Eardley, Kazabazua and Rupert.

MISSISQUOI:

Fordyce motored to Plattsburg, to visit the T.V. Station. 15 members were interviewed during the program, and afterwards enjoyed a conducted tour of the studios. Cowansville and Dunham also reported.

Brides all, but from two different generations.
Picture from the Jubilee.

Abercorn W.I. and guests at a cake demonstration given by Mr. B. Norwood of Parmount Farms Bakery.

PAPINEAU:

Lochaber presented Mrs. R. Johnston with a Life Membership pin and certificate.

PONTIAC:

Clarendon report that 16 members subscribed to the Federated News. **Quyon** sent a letter to the Chamber of Commerce about a Bridge over the Ottawa River, and a letter to the Council re garbage and papers on streets of Quyon. Their project was to secure a Life Guard for the Beach at Quyon. Beech Grove, Bristol, Fort Coulonge, Shawville and Stark Corners also reported.

QUEBEC:

Had a report from Valcartier.

RICHMOND:

Cleveland donated to the Student Loan Fund at St. Francis High School. **Melbourne Ridge** presented Life Memberships to Mrs. Elmer Crack and Mrs. Merrill Taber in recognition of many years of faithful service to the Q.W.I. Gore, Richmond Hill, Spooner Pond, and Denison Mills also reported.

ROUVILLE:

Received a report from the Abbotsford Branch.

SHEFFORD:

Waterloo-Warden brought in their oldest pieces of Handwork. One of the most interesting articles was a Christening dress, over 100 years old. Granby Hill and Granby West also reported.

SHERBROOKE:

Had reports from Ascot, Brompton Road, Lennoxville, and Milby.

STANSTEAD:

Ayers Cliff visited the Dixville home for retarded children. **Beebe** visited the Kraft Cheese factory in Troy, Vt. **North Hatley** had a program on the history of the W.I. in their area, and helped to send a child to a Leadership Course in New Brunswick. **Stanstead North** visited the Dixville Home. **Ways Mills** congratulated Mrs. Claudine Hovey who won a 1st prize in Salada Shirriff Horsey Competition. Mrs. Hovey in turn, presented her prize money to the branch treasury.

THE PREMATURE . . .

(*from page* 20)

given any feedings for 24 hours or longer, depending on condition. A small plastic tube is inserted into the stomach through the nose and taped in place. Formula is injected through the tube every few hours. This enables the baby to receive easily digested formula without using its strength in sucking, as most premature babies are very weak.

Doctors and hospitals usually insist on the baby remaining in the hospital until it reaches a certain weight. This sometimes causes anxiety to the parents, but the weight gain is absolutely necessary to assure that the baby makes good progress at home.

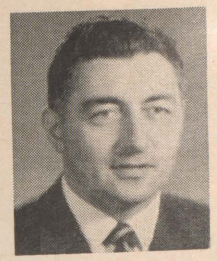
I do not have statistics on premature births but some doctors find that in certain areas and at certain times they appear to be on the increase. There does not seem to be any definite reason for this.

In Canada, and particularly in Quebec, (41 deaths per 1000 live births), we rate very poorly in our fight against infant mortality. The press, at different times, has been critical of pre-natal and post-natal care. A study of your local situation might point up some interesting facts. Visit your hospital, especially on Hospital Day, and find out its needs. This would make a wonderful Branch, County or community project. Finally, if delivery takes place at home, the infant should be taken to hospital where maximum care can be given.

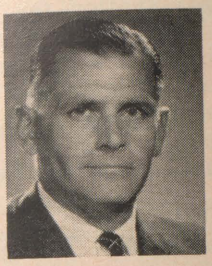
JUNIOR MODELS!

Mrs. Nesbitt with her children who are modelling clothes their mother made for them at W.I. sewing course in Gatineau.

Canadian Institute of Forestry Locates at Macdonald



Mr. J. E. Dosne



Mr. Lowell Besley, president of the Canadian Institute of Forestry, and Chairman of the Woodlands Dept., The Pulp and Paper Research Institute of Canada.

The Canadian Institute of Forestry has moved its Head Office to Macdonald College. The Institute is the national body of professional foresters, with about 2200 members across Canada, mainly in Quebec, Ontario and British Columbia. It has 20 sections operating in various regions from coast to coast. Main objective of the Institute is to promote the interest and standards of the profession of forestry in Canada.

Mr. James J. E. Dosne is secretary-manager of the Canadian Institute of Forestry and will have his headquarters at the College. Mr. Dosne who is 40 years old, was born in France and is completely bilingual. He took his Senior Matriculation at Upper Canada College, Toronto, and his B.Sc.F. at the University of New Brunswick in 1944. For the next two years he served overseas as an officer in the Canadian Army. In 1947 he studied wood utilization at Yale University and obtained the degree of M.F. From 1947 to 1952 he was Control Superintendent for Anglo Canadian Pulp and Paper Mills Ltd., Forestville, and the following six years was Personnel Supervisor for James Maclaren Co., Ltd., Mont Laurier. In 1956 he received an award from the Canadian Pulp and Paper Association and in the same year became a member of the Corporation of Forest Engineers of the Province of Quebec.

Mr. Dosne is married with 6 children and lives in Baie d'Urfé. He is active in community affairs, the Canadian Legion and the Red Cross and enjoys hunting and fishing.

WHITE FROST ON A GRAY ROOF

A man looks on a clipped cornfield, a few scattered pumpkins — and a first frost. It whitens the gray roof of an old barn at morning choretime. It is sometimes hard to tell when a first frost is near in a hill country. Often there is a clear light above a ridge, a chill quietude in a sunset. Summer, which is retreating steadily toward an equinox, drops cottonwood leaves which rustle a warning. There is a shiver in a morning glory vine and its huddled blossoms. A frog is ominously silent on the cold bank of a farm pond. A big bass makes a light supper form a small minnow. The chill deepens as the sun dips. Before any rifle has cracked to startle a deer or a gentian, the frost strikes and a round moon, unscarred by a rocket, rises as yellow as a refrigerated grapefruit.

A morning glory may suffer sadly in a first frost. But a roadside aster never worries about a sudden drop in temperature. A man thinks that an aster, like a distant mountain, has a finer purple on a morning of frost. An aster can look up toward the contrasting brilliance or a September clump of sumac. To each thing its color and season. Even green tomatoes now seek a cellar shelf and a pickle jar. Salvaged from a garden, the last sweet corn is eaten. A woodchuck begins to ready his sleeping quarters and slick up a spare room. He gazes sluggishly on this first white frosting of a pasture slope.

A man likes the first white frost when it shows up on the patched roof of an old barn. There is always something about its arrival which he loves. It means that soon there will be red and gold on a hillside of sugar maples. September's frosty skirmishes are not yet autumn's occupation forces. But the signal has been given for a bright army to take over.

Macdonald Welcomes

MISS RAYMOND

Miss Diane Raymond has been appointed lecturer on the staff of the School of Household Science, effective September 1st.

Miss Raymond was born in Winnipeg. After graduating from the University of Manitoba in 1941, Miss Raymond came with her family to Montreal where she took her Interne Training at the Royal Victoria Hospital. She remained on the staff of the Hospital until she joined the R.C.A.F. During her Air Force career she served overseas with No. 6 Bomber Group. Following her service with the R.C.A.F. Miss Raymond joined the staff of the T. Eaton Co. Restaurant Department where she became manager.

Miss Raymond is a charter member of the Quebec Dietetic Association which she served as president in 1954. She also served as president on the Canadian Dietetic Association in 1958 and held a number of other offices.

Gardening, oil painting and wood-working are her favorite hobbies but she also takes an active interest in the Canadian Legion and the Air Force Association No. 306 Wing.

Macdonald Graduates

REUNION

October 14, 1961

Saturday

Macdonald College

MR. V. R. VICKERY

The Department of Entomology and Plant Pathology has announced the appointment, effective September 1st, 1961, of Mr. Vernon Randolph Vickery to be Curator of the Lyman Entomological Museum which is being transferred from the McGill campus to Macdonald College.

Mr. Vickery is a native of Nova Scotia. He obtained his teacher's licence from the N.S. Normal School in 1940 and spent a year teaching school. He joined the R.C.A.F. and saw service in Canada, Europe and North Africa. He received his B.Sc. (Agr.) from McGill in 1949. Since that time, except for a break for his Master's studies at Macdonald, he has been an extension entomologist with the Nova Scotia Department of Agriculture, based at Truro, where he has had considerable teaching experience. Mr. Vickery is a very versatile entomologist and widely known as an expert on bee-keeping.

Mr. Vickery and his wife Muriel (nee McAloney) have three children, William, Susan and Edwin.

MISS MacLEAN

Miss Mora M. MacLean has been appointed Supervisor of Acquisitions of the library at Macdonald College. Miss MacLean graduated from Queen's University in 1953. After a year in the law library of the Department of External Affairs and three years in the library of the National Gallery, Miss MacLean enrolled at the McGill Library School from which she received her B.L.S. degree in 1958. She served on the staff of the Library, University of British Columbia, then returned to McGill where she acted as a teaching assistant in the Department of English. Miss MacLean received her M.A. from McGill in 1961.

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Then, of course, there's the football player who was pulled off the bench by the coach and told, "Go in there and get ferocious."

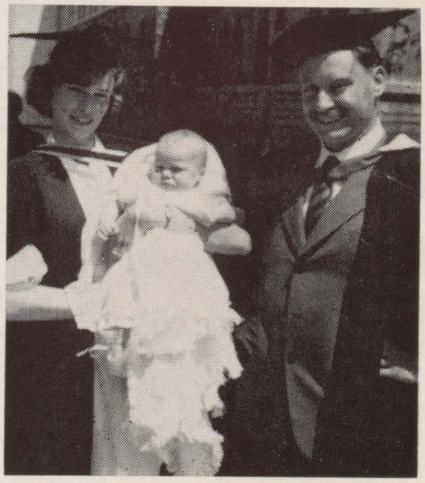
"Sure coach," the lad cried. "Which one is ferocious?"

Double Graduation – Rare Event

A rare event occurred at McGill's past spring convocation when a husband and wife, Mr. and Mrs. Norman Lawson, were each awarded post-graduate degrees in agriculture. Sara Lawson (formerly Sara Grisdale of Iroquois, Ont.) received her M.Sc. for studies on the metabolism for certain compounds in pear leaves and Norman received his Ph.D. in agronomy.

Norman hails from Scotland and met Sara at Macdonald while both were studying, he for his M.Sc. and she for her B.Sc. (Agr.). They have a daughter, Laurie, born last February, who found the sun on graduation day too soothing and slept on her grandmother's lap during the happy occasion. Norman's parents from Dumbarton, Scotland, were present for the double graduation.

Following the graduation exercises the Lawson family moved to Prince George, B.C., where Norman is Research Officer of Plant Breeding on the federal Experimental Farm there. His present problem: to try to produce varieties of forage legumes which will be more productive and longer lived than the Altaswede red clover which is the best presently available for that area where there are only about 80 frost free days.



Sara, Laurie, Norman Lawson

THE MACDONALD LASSIE